Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

In the Matter of)	
)	
Wireless Telecommunications Bureau Seeks)	GN Docket No. 18-353
Comment on Wireless Internet Service Providers)	
Association and Utilities Technology Council)	
Request for Waiver of the Citizens Broadband Radio)	
Service Transition Deadline)	

COMMENTS OF T-MOBILE USA, INC.

T-Mobile USA, Inc. ("T-Mobile")^{1/} submits these comments in response to the request by the Wireless Internet Service Providers Association and Utilities Technology Council (collectively, the "Petitioners") that the Commission waive its rules to extend to January 8, 2023 the period through which grandfathered 3650-3700 MHz band licensees are protected from Citizens Broadband Radio Service ("CBRS") operations.^{2/} This waiver would impede commercial deployment of the 3500-3700 MHz ("3.5 GHz") band and complicate use of the band for new and innovative services, and the Commission should deny it.

I. INTRODUCTION AND SUMMARY

The 3.5 GHz band represents a valuable resource for the provision of Fifth Generation ("5G") wireless mobile broadband services. The 3.5 GHz band, along with potentially the 3.7-4.2 GHz band, is the only mid-band spectrum that the Commission is expected to make available for 5G in the foreseeable future. This is especially significant because, as the Commission has

T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly traded company.

See WISPA UTC, Petition for Waiver of Sections 90.1307 (c) and (d) and Sections 90.1338(a) and (b) of the Commission's Rules, File no. ____ (filed Oct. 4, 2018) ("Petition"); Wireless Telecommunications Bureau Seeks Comment on Wireless Internet Service Providers Association and Utilities Technology Council Request for Waiver of the Citizens Broadband Radio Service Transition Deadline, Public Notice, DA 18-1206 (rel. Nov. 27, 2018).

recognized, mid-band spectrum is "well-suited for next generation wireless broadband services."^{3/}

Ensuring that the 3.5 GHz band is able to support meaningful commercial deployment has already been a multi-year process. While Spectrum Access System ("SAS") and Citizens Broadband Radio Service Device ("CBSD") development were able to begin after the adoption of the 2015 Report and Order, necessary changes to the 2015 3.5 GHz band rules delayed the deployment of commercial services. ^{4/} But the Commission's recent decision modestly adjusting the rules, primarily regarding PAL use of the band, has created more promise for the spectrum. In addition, recent activity demonstrating continued development of equipment and the SAS indicates that commercial deployment in the band will be able to begin soon. ^{5/} The request to extend the transition deadline for grandfathered licensees in the 3650-3700 MHz band, however, would delay the significant progress that has recently been made in the band and the Commission should therefore deny it.

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See, e.g, Expanding Flexible Use of the 3.7 to 4.2 GHz Band, et al., Order and Notice of Proposed Rulemaking, FCC 18-91, ¶ 4 (rel. July 13, 2018). While the Commission recently acted to greatly improve the utility of the 3.5 GHz band, the shared nature of the band and limited power levels mean that it is not a substitute for full power, exclusively licensed spectrum. See Promoting Investment in the 3550-3700 MHz Band, Report and Order, FCC 18-149 (rel. Oct. 24, 2018) ("3.5 GHz Report and Order").

Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, 30 FCC Rcd. 3959 (2015) ("2015 Report and Order"). As the Commission is aware, the technical challenges created by the original licensing structure – which among other things used small license areas and short license terms with no possibility for renewal – would have severely limited the utility of the band for Priority Access License ("PAL") holders and ultimately reduced investment.

^{5/} See 3.5 GHz Report and Order.

II. A FULLY FUNCTIONING CBRS ECOSYSTEM WILL PROMOTE THE MOST EFFICIENT USE OF THE BAND

There is only a limited amount of spectrum available for use in the 3.5 GHz band – 150 megahertz, and some of that spectrum is already occupied. The most effective use of this limited resource across the largest number of potential users can only occur through Commission-approved SAS and Environmental Sensing Capability ("ESC") operators, employing parameters developed for the band. The SAS will facilitate access to the entire band – the spectrum designated for PALs (when not in use by PAL licensees) and the spectrum designated for General Authorized Access ("GAA") operations – by making GAA assignments in PAL spectrum based on data showing near real-time use of the band.

Grandfathered licensees in one third of spectrum – the 3650-3700 MHz portion of the band – will not be protected by SAS Administrators based on near real-time use. Instead, they will continue to be protected regardless of whether their devices are actually in use. Rather than protecting operating stations, grandfathered licensees are protected based on registrations in ULS – the zone remains protected unless the licensee deletes the registration because the base station is taken out of service. As a result, the amount of spectrum available for the SAS to assign GAA operations in the 3650-3700 MHz band will be restricted – potentially artificially – a concern that will be even more urgent after PALs are issued and in operation and that pool of spectrum is not as accessible for GAA use. Eliminating the incumbent protection zones in the

In addition to the grandfathered licensees, incumbent users include federal users and Fixed Satellite Service (FSS) earth stations. *See 2015 Report and Order* ¶¶ 15-22.

See 47 C.F.R. § 96.25(c)(ii) (providing that "[a]ny CBSD that does not make contact with the SAS for seven days shall not be considered in use and will be excluded from the calculation of the PAL Protection Area until such time as contact with the SAS is re-established").

See Wireless Telecommunications Bureau and Office of Engineering and Technology Announce Methodology for Determining the Protected Contours for Grandfathered 3650-3700 MHz Band Licensees, Public Notice, 31 FCC Rcd, 9037, ¶ 21 (2016).

3650-3700 MHz band under the current schedule will free up more spectrum for innovative GAA uses. Therefore, to enable the SAS to work most efficiently and to promote the greatest deployment of spectrum under the Part 96 rules, the Commission must maintain the deadline governing the 3650-3700 MHz grandfathered licensee transition.

III. THERE IS INSUFFICIENT JUSTIFICATION FOR AN EXTENSION

As the Petitioners note, ^{9/} when the Commission adopted the rules governing the 3.5 GHz band 2015, it gave grandfathered Part 90 licensees in the 3650-3700 MHz band a five year transition period ^{10/} that would allow them to operate under their original license terms while also providing them with sufficient time to transition to operations consistent with the new rules. ^{11/} It also provided further relief by giving these grandfathered licensees two means to continue their operations under the Part 96 rules once the transition period ended – acquire new Part 96 equipment, or make low-cost modifications to current Part 90 equipment that would allow the equipment to operate with the SAS. Petitioners provide no convincing reason why they cannot take advantage of the relief the Commission already provided and should therefore not be required to transition to the new rules as planned.

First, contrary to the Petitioners' claims, ^{12/} more and more Part 96 equipment is becoming available. Thus far, Ericsson, Nokia, Sercomm, Sierra Wireless and Arris' Ruckus Networks have received equipment authorization. ^{13/} Given this equipment availability,

^{9/} Petition at 3-4.

¹⁰/ See 47 C.F.R. §§ 90.1307, 90.1338.

¹¹/ *See 2015 Report and Order* ¶ 401.

See Petition at 4.

See OnGo Certification Program, CBRS ALLIANCE, https://www.cbrsalliance.org/certification/ (last accessed Dec. 5, 2018); Sierra Wireless Announces Industry's First FCC Certified Embedded Module for Citizens Broadband Radio Service (CBRS) Networks, FINANCIAL POST (Nov. 6, 2018), https://business.financialpost.com/pmn/press-releases-pmn/business-wire-news-releases-pmn/sierra-

Petitioners have not demonstrated why they cannot obtain and install equipment in a timely manner. Petitioners have over a year to purchase that equipment and put it in operation. And there is no reason to believe that equipment development will not continue or that sufficient equipment will not be available. Petitioners' request instead would place grandfathered licensees in a better position than GAA users, who will be unable to secure access to spectrum due to the SAS protection of grandfathered licensees for longer periods of time, an outcome that will slow development of the band.

Second, even if the grandfathered licensees cannot act to deploy the Part 96 equipment that is now available, they can participate in the GAA ecosystem using their current equipment. As Petitioners admit, ^{15/} the Commission went out of its way to ensure that incumbent Part 90 licensees could continue to operate their equipment under the Part 96 rules after the transition period ends. Specifically, the Commission established rules for Category B CBSDs that would accommodate many incumbent stations; exempted equipment deployed under the preexisting Part 90 rules from the band-wide operability requirement; and authorized proxy controller devices. ^{16/} These accommodations allow grandfathered Part 90 licensees to continue to operate their current equipment under the Part 96 rules – and "under a framework that provides access to greater spectrum that may better meet their needs in the long run" – through the relatively low

wireless-announces-industrys-first-fcc-certified-embedded-module-for-citizens-broadband-radio-service-cbrs-networks.

Petitioners' argument that there is only one "season" for equipment installation does not justify a blanket waiver of the transition rules. The Commission can consider waivers for individual licensees that demonstrate that they have timely purchased equipment and scheduled its installation, but because of verifiable external conditions, could not complete that process.

Petition at 3.

¹⁶ See 2015 Report and Order ¶¶ 395-98.

cost addition of a proxy controller device.^{17/} Petitioners contend that this option is unavailable to them because proxy controller devices have not been developed.^{18/} But the grandfathered licensees are the very entities that should have created the market for these devices and that should have facilitated their development. Petitioners do not detail whether they have taken any steps to drive production of these devices, and if they have, why these attempts have failed.

Third, the development of products and services for the 3.5 GHz band – an alleged reason for relief ^{19/} – is not as uncertain as the Petitioners portray. The recent rulemaking proceeding – which Petitioners claim has "sown doubt and uncertainty into the process" ^{20/} – affected only certain elements of PAL licensing; it had no impact on GAA spectrum or the 3650-3700 MHz band. Nor was there any serious consideration of changing the GAA rules. And while the SAS Administrators have not yet been approved, there has been significant progress, and it is likely they will be operational shortly. ^{21/} T-Mobile, for example, has secured experimental authorization to conduct testing in the 3.5 GHz band in Chicago, Houston, Los Angeles and Las Vegas. ^{22/} Accordingly, there are no reasons that should delay Part 90 incumbents who wish to convert to GAA operations.

IV. CONCLUSIONS

The Commission recently took much needed action to help encourage investment and deployment in the 3.5 GHz band, and it should not now set back the band's potential for success

¹⁷/ *2015 Report and Order* ¶ 399.

See Petition at 4.

^{19/} See id.

^{20/} *Id.*

The Commission is currently reviewing proposals for short-term, limited geographic commercial deployment from six conditionally approved SAS Administrators. *See Report to Congress Pursuant to Section 1008 of the Spectrum Pipeline Act of 2015, As Amended by the Ray Baum's Act of 2018, et al.*, Report, DA 18-1128, ¶ 12 (rel. Nov. 2, 2018).

See Experimental Special Temporary Authorization Station WN9XOO.

by delaying the transition period for certain incumbents in the 3650-3700 band. Accordingly, the Commission should deny Petitioners' request for wavier of the rules governing the period within which they are entitled to protection from Part 96 operations.

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